

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A printhead ink supply structure comprising:

a silicon substrate having a plurality of thermal elements and a main ink supply channel, and the main ink supply channel connecting to an ink cartridge of the printhead;

a first barrier layer having a plurality of firing chambers installed at positions corresponding to the thermal elements and a plurality of ink channels ~~connecting~~ connected to the firing chambers and the main ink supply channel by inlets;

a second barrier layer having a plurality of slots extending from the main ink supply channel to the inlets of the ink channels, the second barrier layer at least partially covers the ink chamber;

and

a nozzle plate covering the first barrier layer and the second barrier layer, having a plurality of nozzles installed at positions corresponding to the firing chambers,

wherein the first barrier layer is located at one of

between the nozzle plate and the second barrier layer, or
over the second barrier layer.

2. (Cancelled)

3. (Original) The printhead ink supply structure of claim 1, wherein the first barrier layer is between the nozzle plate and the second barrier layer.

4. (Original) The printhead ink supply structure of claim 3, wherein the second barrier layer has a plurality of holes at positions correspond to the nozzeles.

5. (Original) The printhead ink supply structure of claim 1, wherein the second barrier layer is under the first barrier layer.

6. (Cancelled)

7. (Currently Amended) A printhead ink supply structure comprising:

a silicon substrate having a plurality of thermal elements and a main ink supply channel, and the main ink supply channel connecting to an ink cartridge of the printhead;

a first barrier layer having a plurality of firing chambers installed at positions corresponding to the thermal elements and a plurality of ink channels ~~connecting~~connected to the firing chambers and the main ink supply channel by inlets;

a second barrier layer provided on the upper and lower sides of the first barrier layer, each having a plurality of slots extending

from the main ink supply channel to the inlets of the ink channels,
the second barrier layer at least partially covers the ink chamber;
and

a nozzle plate covering the first barrier layer or the second barrier layer and having a plurality of nozzles installed at positions corresponding to the firing chambers.

8. (Currently Amended) The printhead ink supply structure of claim 7, wherein each of the slots ~~ends~~end on the other side of the inlet of one of the ink channels.

9. (New) The printhead ink supply structure of claim 7, wherein the slots of the second barrier layer terminate at the inlets of the ink channels.

10. (New) The printhead ink supply structure of claim 7, wherein the inlets of the ink channels are adjacent the ink chamber.